**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. Canceled.

2. (Currently Amended) The method of claim ~~1~~ 3 further comprising bypassing the echo canceller and suppressing echo of the signal by an echo suppressor instead, when the estimated complexity exceeds a threshold.

3. (Previously Presented) A method of managing resources of a system, comprising:

processing a signal;

estimating signal processing complexity; and

adjusting adaptation speed of an echo canceller for processing the signal, when the estimated complexity exceeds a threshold, wherein the signal processing comprises adaptively canceling the echos from the signal, and the estimating signal processing complexity comprises estimating echo return loss enhancement (ERLE) of the echo canceller.

4. (Previously Presented) The method of claim 3 wherein the estimating signal processing complexity comprises estimating maximum power level of a reference signal, long term average power of an error signal, and long term average power of a near end signal.

5 - 17 Canceled.

18. (Currently Amended) The method of claim ~~17~~ 20 further comprising bypassing the echo cancellation function and suppressing echo of the signal by an echo suppressor instead, when the sum of the estimated average complexities exceeds a threshold.

19. (Previously Presented) The method of claim 20 wherein adjusting adaptation speed of the echo cancellation function comprises reducing the complexity of the echo cancellation adaption.

20. (Previously Presented) A method of managing resources of a system, comprising:

performing a plurality of signal processing functions on a signal, including echo cancellation function;

estimating average complexity of each of the signal processing functions;

summing the estimated average complexity of the each of the signal processing functions; and

adjusting adaptation speed of the echo cancellation function, when the sum of the estimated average complexities exceeds a threshold, wherein the estimating signal processing complexity comprises estimating maximum power level of a reference signal, long term average power of an error signal, and long term average power of a near end signal.

21 - 34 Canceled.

35. (Currently Amended) The data transmission system of claim ~~33~~ 36 wherein the signal processor comprises an echo suppressor, and the resource manager reduces the signal processor complexity by bypassing the echo canceller and suppressing echo of the signal by the echo suppressor instead, when the estimated complexity exceeds a threshold.

36. (Currently Amended) A data transmission system, comprising:

a telephony device which outputs a signal; and

a signal processor coupled to the telephony device, the signal processor comprising a resource manager that estimates signal processor complexity based on characteristics of the signal, and adjusts adaptation speed of an echo canceller for processing the signal by changing the number of coefficients of the echo canceller, when the estimated complexity exceeds a threshold, ~~The data transmission system of claim 33~~ wherein the resource manager estimates signal processor complexity by estimating echo return loss enhancement (ERLE) of the echo canceller.

37. (Previously Presented) The data transmission system of claim 36 wherein the resource manager estimates maximum power level of a reference signal, long term average power of an error signal, and long term average power of a near end signal.

38-48. Canceled.

49. (Currently Amended) A resource manager for a signal processor, comprising:

estimation means for estimating signal processor complexity based on characteristics of the signal; and

adjusting means for adjusting adaptation speed of an echo canceller for processing the signal by changing the number of coefficients of the echo canceller, when the estimated complexity exceeds a threshold, wherein the estimation means comprises means for estimating maximum power level of a reference signal, long term average power of an error signal, and long term average power of a near end signal.

50. (Previously Presented) The resource manager of claim 49 further comprising echo suppressing means, and wherein the adjusting means comprises means for bypassing the echo canceller and suppressing echo of the signal by the echo suppression means instead, when the estimated complexity exceeds a threshold.

51 - 62 Canceled.

63. (Currently Amended) A resource manager for a signal processor performing a plurality of functions including echo cancellation function, comprising:

estimation means for estimating average complexity of each of the functions by comparing a first signal to a second signal;

summing means for summing the estimated average complexity of each of the functions; and

adjusting means adjusting adaptation speed of the echo cancellation function by changing the number of coefficients of an echo canceller, when the sum of the estimated average complexities exceeds a threshold, wherein the adjusting means comprises means for estimating maximum power level of a reference signal, long term average power of an error signal, and long term average power of a near end signal.

64. (Previously Presented) The resource manager of claim 63 further comprising echo suppress means, and wherein the adjusting means comprises means for bypassing the echo canceller and suppressing echo of the signal by the echo suppressing means instead, when the estimated complexity exceeds a threshold.

65 - 76 Canceled.

77. (Currently Amended) Computer-readable media embodying a program of instructions executable by a computer to perform a method of managing resources of a signal processing system, the method comprising:

estimating signal processing complexity based on characteristics of the signal; and

adjusting adaptation speed of an echo canceller for processing the signal by changing the number of coefficients of the echo canceller, when the estimated complexity exceeds a threshold, wherein the estimating signal processing complexity comprises estimating maximum power level of a reference signal, long term average power of an error signal, and long term average power of a near end signal.

78. (Previously Presented) The computer-readable media of claim 77 further comprising instructions for bypassing the echo canceller and suppressing echo of the signal by an echo suppressor instead, when the estimated complexity exceeds a threshold.

79 - 92 Canceled.

93. (Currently Amended) Computer-readable media embodying a program of instructions executable by a computer to perform a method of managing resources of a system which performs a plurality of signal processing functions including echo cancellation function on a signal, the method comprising:

estimating average complexity of each of the signal processing functions by comparing a first signal to a second signal;

summing the estimated average complexity of the each of the signal processing functions; and

adjusting adaptation speed of the echo cancellation function by changing the number of coefficients of the echo

canceller, when the sum of the estimated average complexities exceeds a threshold, wherein said estimating signal processing complexity comprises estimating maximum power level of a reference signal, long term average power of an error signal, and long term average power of a near end signal.

94. (Previously Presented) The computer-readable media of claim 93 further comprising instructions for bypassing the echo cancellation function and suppressing echo of the signal by an echo suppressor instead, when the sum of the estimated average complexities exceeds a threshold.

95. (Previously Presented) The computer-readable media of claim 93 wherein the adjusting adaptation speed of the echo cancellation function comprises reducing the complexity of the echo cancellation adaption.

96 - 108 Canceled.